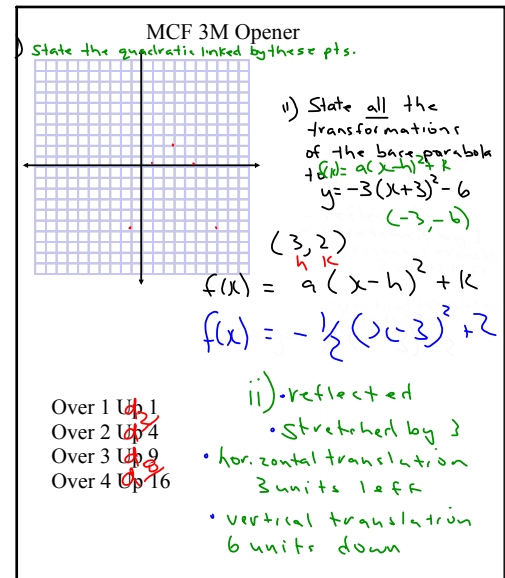
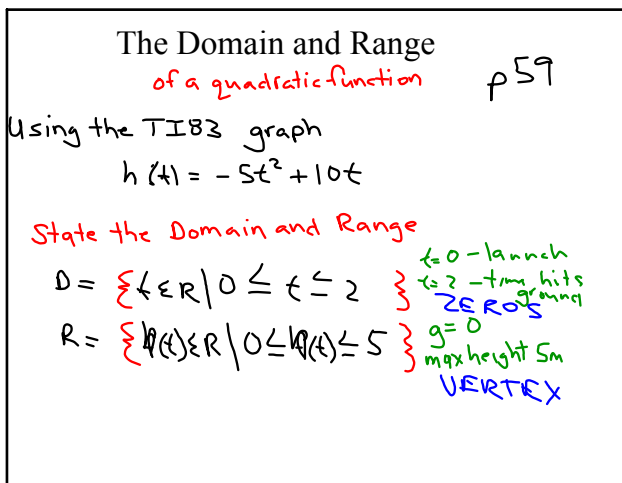


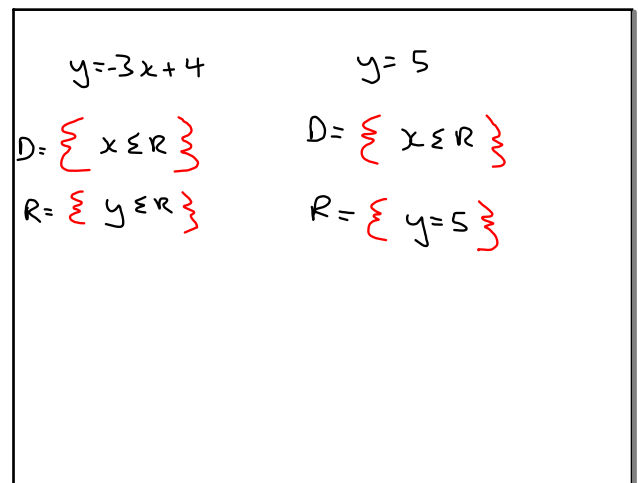
Feb 11-3:37 PM



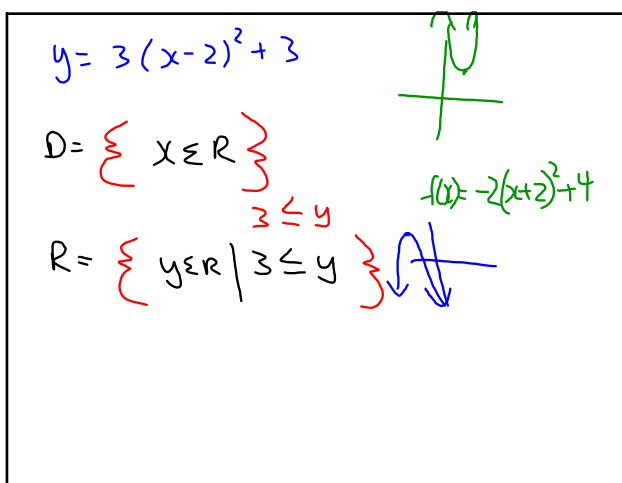
Feb 11-3:37 PM



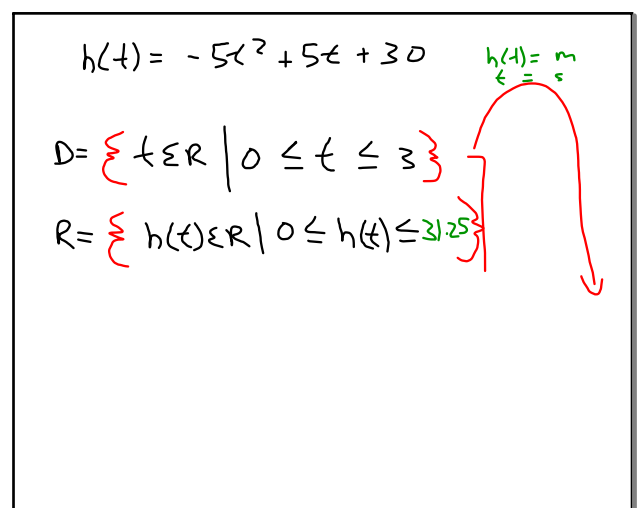
Feb 11-3:47 PM



Feb 12-10:42 AM



Feb 12-10:38 AM

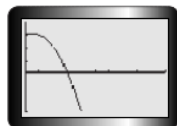


Feb 12-10:47 AM

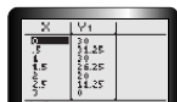
Restrictions
ques. 4 p.62

A baseball thrown from the top of a building falls to the ground below. The path of the ball is modelled by the function $h(t) = -5t^2 + 5t + 30$, where $h(t)$ is the height of the ball above ground, in metres, and t is the elapsed time in seconds. What are the domain and range of this function?

Kendall's Solution



Time is the independent variable, so the domain is all of the times the ball is in the air. I graphed the function on a graphing calculator, using only positive numbers for time.



I examined the resulting table of values.

Sep 14-7:54 AM

Homework

2, 3, 4, 6, 7 p.64



$$f(x) = -2(x+3)^2 + 5 \quad (-3, 5)$$

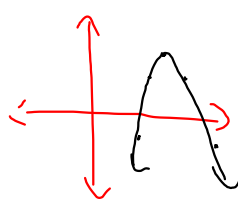
$$D = \{x \in \mathbb{R}\}$$

$$R = \{f(x) \in \mathbb{R} \mid f(x) \leq 5\}$$

Feb 11-3:53 PM

$$y = a(x-h)^2 + k \quad (h, k)$$

$$y = -2(x-5)^2 + 6 \quad (5, 6)$$



over 1 up 1
over 2 up 4
over 3 up 9
over 4 up 16

Feb 16-9:16 AM



$$y = 2x^2 + 4x + 7$$

13
7
13

(h, k)

$$R = \{y \in \mathbb{R} \mid y \geq 5\}$$

$$R = \{y \in \mathbb{R} \mid 5 \leq y\}$$

Sep 14-10:32 AM

Sep 13-1:45 PM